

Application No.: 10/691140
Docket No.: FL0253USNA

Page 2

Amendments to the Specification:

Please replace paragraph beginning on page 1, line 31 continuing through page 2, line 6.

Copolymers of this invention have repeat units derived from tetrafluoroethylene (TFE) and perfluoro(alkyl vinyl ethers) (PAVE). The PAVE is represented by Formula 1 or Formula 2.

Formula 1: $\text{CF}_2=\text{CF}(\text{OCF}_2\text{CF}(\text{CF}_3))_n-\text{O}-(\text{CF}_2)_m\text{CF}_2\text{X}-\text{CF}_2=\text{CF}(\text{OCF}_2\text{CF}(\text{CF}_3))_n-\text{O}-(\text{CF}_2)_m\text{CF}_2\text{X}$ where X = H or F, n in an integer from 0 to 5 and m in an integer from 0 to 7.

Formula 2: $\text{CF}_2=\text{CF}(\text{OCF}_2\text{CF}(\text{CF}_3))_q-\text{O}-\text{CF}_2\text{CF}(\text{CF}_3)_2-\text{CF}_2=\text{CF}(\text{OCF}_2\text{CF}(\text{CF}_3))_q-\text{O}-\text{CF}_2\text{CF}(\text{CF}_3)_2$ where q is an integer from 0 to 3.

Preferred PAVEs are perfluoro(propyl vinyl ether) (PPVE) and perfluoro(ethyl vinyl ether) (PEVE). Copolymers with PEVE are more preferred because they exhibit excellent mechanical durability. Such copolymer may be manufactured by emulsion polymerization, suspension polymerization, solution polymerization, in aqueous solution, in nonaqueous solvent, or in mixed media, which are disclosed in U.S. Patent 5,760,151, Unexamined Japanese Application Publication Kokai H7-126329 and the like.

Please replace Table 3 on page 6 as follows:

Table 3

		Example 1	Comp.Ex. 1	Example 2	Comp.Ex. 2
Copolymer Comonomer Content (wt%) A		8.6	8.6	8.3	6.6
MFR (g/10 min.)		0.5	0.5	1.1	1.9
PTFE MFR 15.1 g/10 min (wt%) B		40	60	40	40
Composition Comonomer Content (wt%) C		5.2	3.4	5.0	4.0
MFR (g/10 min.)		1.3	2.6	2.6	4.4
Flex life (cycles)	Measured	>5.3 million	0.12 million	2.7 million	0.35 million
	Calculated	4.7 million	0.49 million	1.3 million	.31 million
Comonomer content C in the composition was calculated from the following equation as a weight % of comonomer with respect to the sum of the copolymer and PTFE: $C = A \times (1 - B/100) / C = A \times (1 - (B/100))$					